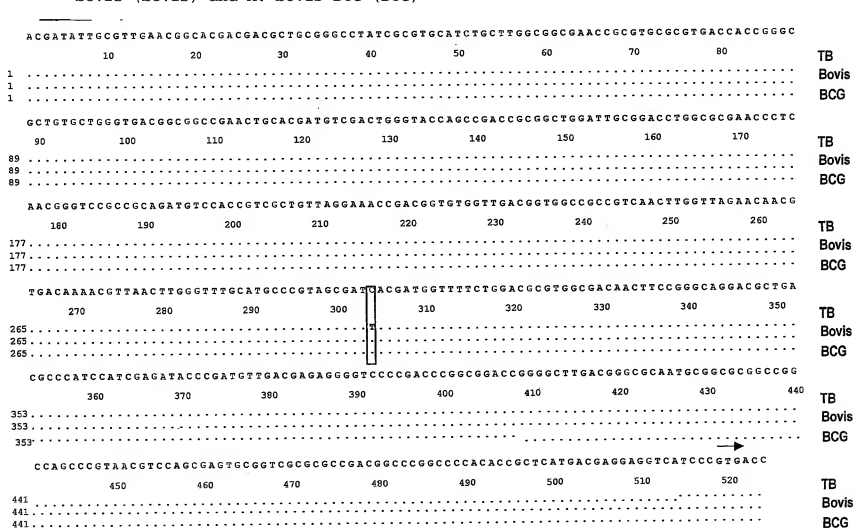
Figure 1: Comparison of the narGHJI promotor of *M. tuberculosis* (TB), *M. bovis (bovis)* and *M. bovis* BCG (BCG)



Replacement sheet

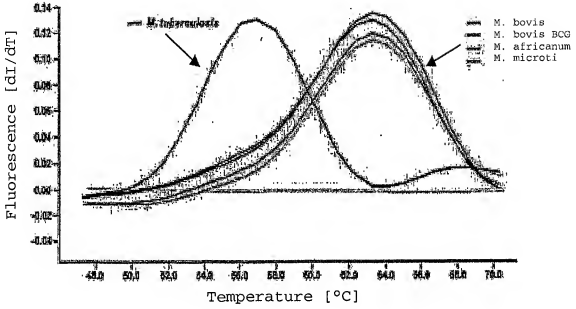


Figure 2

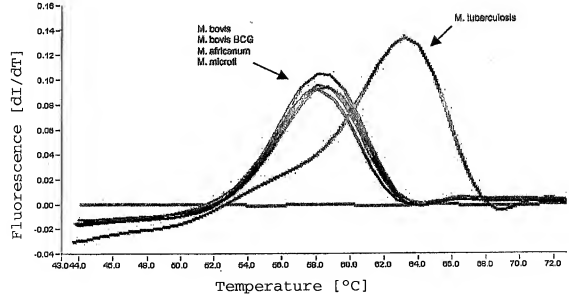
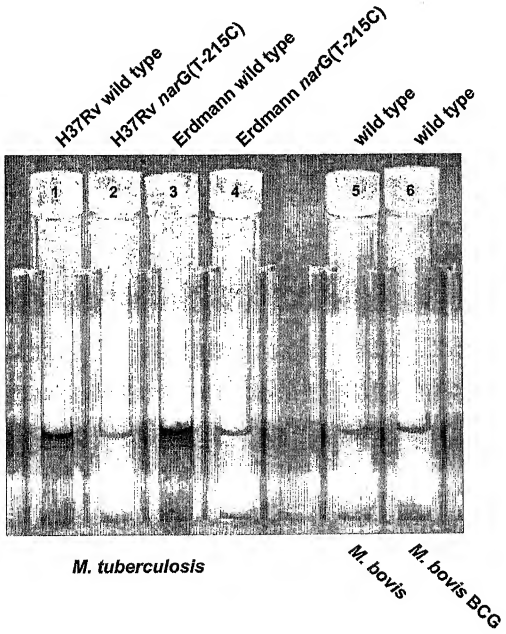


Figure 3

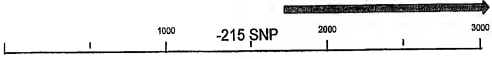
Replacement sheet

Figure 4: nitrate reductase assay: *M. tuberculosis* wild type and mutants, *M. bovis* and *M. bovis* BCG in comparison



Replacement sheet

Figure 5: -215 SNP with 150 bp flanking sequences



1500 bases upstream and downstream of the -215 SNP ("T") in the promotor of the narGHJI operon:

```
CTCGGGTGTCAAGTTGACGCCGGCGATTACCGCTGTCTACCTCGTCGGCGTTCGGCGGTT     60
GCATGCGGCCGCATTTCGGTGGTCGTGTTCCTTGCCACCGTCGGCGTGTCGCTACTGGT    120
CGTCGGCGATGAAGCCCGCTACTACTTCACCGACCTGTTGGGCGACGCAGGCCGGGTTGG    180
GCCCATCGCCACCTCCTTCAATCAATCCTGGCGCGGCGCGATTTCCCGGATTCTCGGTCA    240
CGACGCCGGTTTTGGTCCGCTGGTTCTGGCTGCGATCGCCAGTACGGCGGTATTGGCCAT    300
CCTGGCCTGGCGTGCGCTCGACAGGTCCGATCGGCTGGGCAAACTATTGGTGGTCGAGTT    360
GTTCGGCCTGCTGCTCTCGCCGATCTCCTGGACTCACCACTGGGTGTGGCTAGTGCCGCT    420
GATGATCTGGCTGATTGACGGGCCAGCGCGTGAGCGCCCGGGCGCCCGGATTTGGGCTG    480
GGGCTGGTTGGTGTTGACCATCGTCGGCGTGCCGTGGTTGCTGAGCTTTGCTCAACCGAG    540
CATCTGGCAAATCGGCCGGCCGTGGTATTTGGCCTGGGCCGGTCTGGTCTACGTGGTGGC    600
GACGCTGGCGACCTTGGGCTGGATCGCCGCCTCCGAGCGTTACGTGCGCATTCGGCCGCG    660
GCGCATGGCCAATTAGGCCCCAAACATTGCGTCGATATCGTGCGCCATCGCAATGTCGTT    720
TTCCGTGATACCACCTACCGCATGCGTAACCAGCGCGAAAGTTACTGTTCGCCAACGGAT    780
ATCGATGTCCGGATGATGATTTACCTCCTCGGCTCGCTCGGCCACCCGGCGTACGGCGTC    840
GATACCGGCCATAAACGTCGAAACTTGATTGACCTACGCAGGACACCACCGGCGCGCTG    900
CCAGCCGTTGAGGTCGTGCAGTCGGCGTCGACCTGCTCATCCGTTAACAGCAGCCATACC    960
TCGACGGTATACCGTCACAGGTCATGCTGAATCAGATCGTGGTTGCCGGAGCCATCGTCC   1020
GCGGTTGCACGGTCTTGGTGGCGCAACGCGTTCGGCCACCGAGTTGGCGGGTCGTTGGG   1080
AACTTCCCGGCGGTAAGGTCGCCGCCGGCGAAACCGAGCGCGCCGCGCTGGCCCGAGAGC   1140
TCGCCGAAGAACTGGGACTCGAGGTCGCCGACCTCGCGGTGGGCGACCGTGTGGGCGACG   1200
ATATTGCGTTGAACGGCACGACGACGCCGTCGGGGCCTATCGCGTGCATCTGCTTGGCGGCG   1260
AACCGCGTGCGCGTGACCACCGGGCGCTGTGCTGGGTGACGGCGGCCGAACTGCACGATG   1320
TCGACTGGTAACCAGCCGACCGCGGCTGGATTGCGGACCTGGCGCGAACCCTCAACGGGT   1380
CCGCCGCAGATGTCCACCGTCGCTGTTAGGAAACCGACGGTGTGGTTGACGGTGGCCGCC   1440
GTCAACTTGGTTAGAACAACGTGACAAAACGTTAACTTGGGTTTGCATGCCCGTAGCGAT   1500
TACGATGGTTTTCTGGACGCGTGGCGACCAACTTCCGGGCAGGACGCTGACGCCCATCCAT   1560
CGAGATACCCGATGTTGACGAGAGGGGTCCCCGACCCGGCGGACCGGGGCTTGACGGGCG   1620
CAATGCGGCGCGGCCGGCCAGCCCGTAACGTCCAGCGAGTGCGGTCGCGCGCCGACGGCC   1680
CGGCCCCACACCGCTCATGACGAGGAGGGTCATCCCGTGACCGTTACACCTCACGTCGGT   1740
GGACCGCTCGAAGAGCTGCTGGAGCGCAGCGGGCGCTTCTTCACCCCAGGTGAGTTCTCG   1800
GCCGACCTGCGCACCGTAACCCGGCGCGGCGGCCGCGAAGGTGACGTGTTCTACCGCGAT   1860
CGGTGGAGTCACGACAAAGTGGTCCGATCCACGCACGGAGTCAACTGCACCGGATCCTGC   1920
TCATGGAAGATCTACGTCAAAGACGGGATCATCACCTGGGAAACCCAGCAGACCGACTAC   1980
CCGTCGGTGGGCCCGGACCGGCCCGAATACGAGCCACGAGGTTGTCCCCGTGGCGCGTCG   2040
TTCTCCTGGTACAGCTATTCGCCGACGCGGGTGCGCTATCCGTATGCCCGGGGCGTGCTG   2100
GTTGAGATGTACCGGGAAGCCAAGACCCGCCTGGGCGACCCGGTGCTGGCGTGGGCCGAC   2160
ATTCAGGCGGATCCCGAGCGCAGACGCCGCTATCAACAGGCCCGCGGCAAGGGTGGGCTG   2220
GTCCCGGGTGAGCTGGGCCGAGGCCAGCGAGATGGTGGCCGCCGCCCACGTGCACACCATC   2280
AAGACATACGGCCCGGACCGGGTCGCCGGCTTCTCGCCGATTCCGGCGATGTCAATGGTC   2340
AGCCATGCCGCGGGGTCCCGGTTCGTGGAGCTGATCGGCGGCGCTGATGACGTCGTTCTAC   2400
GACTGGTACGCCGACTTGCCGGTGGCCTCGCCGCAGGTGTTCGCGACCAGACCGACGTG   2460
CCCGAATCCGGCGACTGGTGGGATGCGTCGTATTTGGTCATGTGGGGCTCCAACGTCCCG   2520
ATCACCCGGACGCCCGACGCACATTGGATGGCGGAGGCCCGTTACCGCGGCGCTAAAGTC   2580
GTTGTCGTCAGCCCGGACTACGCCGACAACACCAAGTTCGCCGACGAGTGGGTCGGTGC   2640
GCCGCCGGTAACCGATACCGCGCTGGCGATGGCGATGGGCCACGTGATCCTGTCGGAATGT   2700
TACGTCCGTAACCAGGTTCCGTTCTTTGTCGACTATGTGCGCCGCTACACCGACCTGCCG   2760
TTTTTGATCAAGTTGGAAAAGCGGGGCGACCTGCTGGTTCCCGGAAAGTTCTTGACCGCG   2820
GCCGACATTGGTGAAGAAAGTGAGAACGCGGCGTTCAAACCCGCCCTGCTGGATGAGCTT   2880
ACGAATACCGTTGTCGTGCCGCAGGGCTCACTGGGATTCCGTTTCGGTGAGGACGGTGTT   2940
GGGAAGTGGAACCTGGACCTGGGTTCGGTGGTGCCGGCGCTAAGTGTGGAGATGGACAAG   3000
GC
```